



## English: What is Creative Writing?

| Word                                   | Definition   |
|--|--|
| Creative Writing                       | Writing, typically fiction or poetry, which displays imagination or invention.   |
| Narrative arc                          | A term that describes a story's full progression.  |
| Perspectives                           | Point of view.   |
| Paragraphing                           | Organisation of writing.   |
| First person narrative perspective     | Point of view using 'I'.   |
| Second person<br>narrative perspective | Point of view using 'you'.   |
| Third person narrative perspective     | Point of view using 'they/he/she'.   |
| Gothic genre                           | A genre that places strong emphasis on intense<br>emotion, pairing terror with pleasure and death with<br>romance. The Gothic is characterised by its darkly<br>picturesque scenery and its eerie stories of the<br>macabre. |



#### Maths:

| Key Word               | Definition  |
|------------------------|---|
| Acute                  | Angles that are less than 90°   |
| Obtuse                 | Angles that are greater than 90° and less than 180°   |
| Reflex                 | Angles that are greater than 180° and less than 360°  |
| Quadrilateral          | A 4 sided straight edged shape  |
| Line symmetry          | The line that divides a shape or object into two equal symmetrical parts                        |
| Rotational<br>symmetry | The number of times a shapes fits back onto itself in one full turn.                            |
| Ratio                  | The relationship between two or more amounts (2:1 read as two to one)                           |
| Faces                  | The flat surface of a 3D shape  |
| Edges                  | Where two faces of a 3D shape meet  |
| Vertices               | Where two or more edges of a 3D shape meet (often called corners) a single corner is a vertex.  |
| Net                    | The shape you get when a 3D shape is opened out flat. The net can be folded to make a 3D shape. |



## Science: Physics Topic 1

| Waves              | Vibrations that transfer energy from one place to another without the permanent transfer of matter.  |
|--------------------|--|
| Longitudinal waves | Vibrations that are parallel to the direction of energy transfer. Examples include sound waves and seismic P waves.  |
| Transverse waves   | Vibrations that are perpendicular to the direction of energy transfer.<br>Examples include seismic S waves, water waves, radio waves,<br>microwaves, infrared waves, light waves, ultraviolet waves, x-rays and<br>gamma rays. |
| Crest              | The highest point of a transverse wave.<br>Also called a peak.   |
| Trough             | The lowest point of a transverse wave.   |
| Equilibrium        | The middle point of a transverse wave.<br>Also called the rest position.   |
| Amplitude<br>(a)   | The distance in metres from a crest or trough, to the equilibrium.   |
| Wavelength (λ)     | The distance in metres from one crest to the next, or one trough to the next, or from the centre of one compression to the next, or the centre of one rarefaction to the next.   |
| Frequency<br>(f)   | The number of complete waves passing a point each second, measured in Hertz (Hz).  |
| Time period<br>(t) | The time taken for one complete wave to pass by, measured in seconds.  |
| Superposition      | When two waves meet and affect each other. They can add together to produce a larger wave or cancel out.   |
| Sound waves        | Longitudinal vibrations that transfer energy through matter.   |
| Compression        | A region of higher pressure, where the particles are closer together than normal.  |
| Rarefaction        | A region of lower pressure, where the particles are closer together than normal.   |
| Loudness           | How loud or quiet a sound is due to an increase or decrease in amplitude.<br>Measured in decibels (dB). Also known as volume.  |
| Pitch              | How high or low a sound is due to an increase or decrease in frequency and wavelength. Measured in Hertz (Hz).   |
| Sound propagation  | The transmission of energy by sound waves through a medium.  |
| Sound medium       | A substance in which sound can travel. Examples include air, water, and solids, but not a vacuum.  |
| Echo               | Made by a sound wave reflecting off a surface.   |
| Pinna              | Part of the outer ear that funnels sound waves into the ear canal which makes the eardrum vibrate.   |



| Ear canal            | A tube leading from the pinna to the eardrum that sound waves travel   |
|----------------------|--|
|                      | through. Part of the outer ear.<br>A membrane that vibrates when sound waves hit it. Part of the outer ear.  |
| Eardrum              | A membrane that vibrates when sound waves hit it. Part of the outer ear.   |
|                      |  |
|                      |  |
| Ear bones            | Bones that vibrate to pass on sound waves from the eardrum to the  |
|                      | cochlea. Include the hammer, anvil and stirrup. Part of the middle ear.  |
| Cochlea              | A spiral tube containing liquid and nerve cells that receives vibrations   |
|                      | from the ear bones and converts them to electrical signals. Part of the inner ear.   |
| Auditory poryo       | Sends electrical signals from the cochlea to the brain which translates  |
| Auditory nerve       | them into sound.   |
| Infrasound           | Sound waves with a frequency lower than 20 Hz.   |
| Ultrasound           | Sound waves with a frequency above 20,000 Hz. Used to look inside the body,  |
| Ontrasound           | locate objects or organisms, break down kidney stones, clean delicate objects,   |
|                      | and check for faults inside objects.   |
|                      |  |
| Light waves          | Transverse vibrations that transfer energy through matter. Travel in straight lines at 300,000,000 m/s. Can pass through a vacuum, transparent and translucent |
|                      | materials, but not opaque materials.   |
|                      |  |
| Luminous             | Objects that produce light waves.  |
| Reflection           | When a light incident ray hits a plane (flat), shiny object and bounces off.   |
|                      | The angle of incidence is always equal to the angle of reflection.   |
| Refraction           | When light changes speed and direction as it is transmitted through an   |
|                      | object at an angle with change in density. When light passes from air into   |
| Discontinu           | glass, the angle of incidence is greater than the angle of refraction.<br>When white light is refracted and spread out into the separate colours of            |
| Dispersion           | the visible spectrum.  |
| Cornea               | Transparent domed structure that refracts (bends) light as it enters the   |
| conicu               | eye.   |
| Iris                 | Coloured structure that controls how much light enters the pupil.  |
| Pupil                | Hole that allows light to enter the eye.   |
| Lens                 | Transparent biconvex disc that further refracts (bends) light to focus it  |
|                      | onto the retina.   |
| Suspensory ligaments | Connect the lens to the ciliary muscles.   |
| Ciliary muscles      | Contract and relax to change the shape of the lens.  |
| Retina               | Contains light receptor cells – rods detect light intensity and cones detect   |
|                      | colour.  |
| Fovea                | The central focal point on the retina containing the most cone cells.  |
| Optic nerve          | Carries electrical messages from the eye to the brain.   |
| Sclera               | Strong outer wall of the eyeball that helps keep the eye in shape.   |
| Converging lenses    | Converging lenses refract light, causing it to converge on a single point. A   |
|                      | biconvex lens is used to focus light.  |
| Diverging lenses     | Diverging lenses refract light, causing it to diverge towards different  |
|                      | points. A biconcave lens is used to spread light out.  |



| Pinhole camera     | A box or tube with a translucent screen at one end and a tiny pinhole made in the other end.   |
|--------------------|--|
|                    | Light enters the box through the pinhole and is focused by the pinhole   |
|                    | onto the translucent screen.   |
|                    | The image is upside down and smaller than the object.  |
| Day                | The time it takes for a planet to rotate once on its axis. On Earth, a day is  |
| /                  | 24 hours long.   |
| Night              | When the side of a planet is facing away from the Sun and so light is not  |
| 2                  | shining on it.   |
| Year               | The time it takes for a planet to make one complete orbit around the Sur   |
|                    | On Earth, a year is usually 365 days long.   |
| Axis               | The imaginary line running through the Earth from the North to the Sout  |
|                    | pole on which the Earth rotates. Earth's axis is tilted at 23.5°.  |
| Summer             | A season on Earth caused when it is tilted towards the Sun.  |
| Winter             | A season on Earth caused when it is tilted away from the Sun.  |
| Month              | The time it takes for the Moon to make one complete orbit around the   |
|                    | Earth.   |
| Gravity            | Attracts objects towards each other. Increases as the mass of an object  |
| ,                  | increases and as the distance between objects decreases.   |
| Mass               | How much matter an object is made out of. Measured in kilograms (kg)   |
|                    | using a balance.   |
| Weight             | The force that acts on mass due to gravity. Measured in Newtons (N)  |
|                    | using a newton meter.  |
| Star               | An enormous ball of gases which produces large amounts of heat and   |
|                    | light, due to nuclear fusion reactions in its core. Our nearest star is the  |
|                    | Sun.   |
| Nebula             | A large cloud of gas and dust pulled together by gravity to form a new   |
| Ded (auner) signat | star.<br>When the outer layers of a star expand due to the fusion of heavier   |
| Red (super) giant  | elements releasing lots of energy.   |
| Dianotary pobula   | When the outer layers of a star no longer feel the pull of gravity and drift   |
| Planetary nebula   | off into space.  |
| White dwarf        | The hot, dense core of a dead star.  |
|                    | The cooled, dense core of a dead star.   |
| Black dwarf        |  |
| Supernova          | When the core and outer layers of a massive star collapse once fusion  |
|                    | stops and cause an explosion.The hot, dense core of a massive dead star.   |
| Neutron star       |  |
| Black hole         | The final stage of the lifecycle of the largest stars. A region of space   |
|                    | where gravity is so strong that not even light can escape.   |
| Solar system       | The Sun and the objects that orbit around it, including eight planets,   |
|                    | many moons, five dwarf planets, asteroids, comets, gas and dust.   |
| Galaxy             | Contains billions of stars held together by gravity. Ours is called the Milky  |
|                    | Way and is one of many in the universe.  |
| Universe           | Created by the Big Bang about 13 billion years ago. Contains all existing  |
| 1:                 | matter and space including vast numbers of galaxies.<br>The distance travelled by light in one year (9.46 trillion kilometres). Used |
| Light year         | I me distance travened by light in one year (9.46 trinion knometres). Used   |



## Geography: Why are Volcanoes so hazardous?

| Active:               | A volcano which is actually erupting   |
|-----------------------|--|
| Dormant:              | A volcano which is 'asleep' - it can go off again, but at present is not doing so.   |
| Extinct:              | Like the dinosaurs, this type of volcano is not going to go off again  |
| Composite<br>Volcano: | A tall volcano found at a destructive plate boundary.  |
| Super<br>volcanoes:   | These are huge volcanoes that erupt extremely rarely. The last one to erupt was the<br>Oruanui eruption in New Zealand - which exploded approximately 26,500 years before<br>now. The most well-known example is the Yellowstone Super volcano which would<br>change the planet as we know it, should it erupt |
| Pyroclastic<br>Flow:  | A mixture of gases, rock, steam, ash, and lava - the flows hurtle down the side of the volcano during an eruption. The gases are usually hot enough to destroy the respiratory system of anyone who caught in one, they also carry rocks the size of houses - basically you would be killed.                   |
| Lahar:                | A mixture of mud and water often created because an eruption causes snow and ice on<br>the side of the volcano to melt - this will then run downslope picking up debris and mud.<br>A lahar can be very dangerous if you are caught in the flow.   |
| Shield<br>Volcano:    | A low and flat volcano found usually at a constructive plate boundary  |
| Hot Spot<br>Volcano   | Volcanoes can be found where there are sections of the mantle which are especially hot<br>and active. Volcanoes form where lava rises through the crust. The Hawaiian Islands<br>(USA), are probably the most well known hot-spot volcanoes.   |
| Magma                 | Super-hot melted rock that is now a liquid, but is found within the Earth. Lava is the name given to this when it has emerged from within the Earth's crust.   |



## **History: Medieval Religion**

| Key Word      | Definition   |
|---------------|--|
| Catholic      | Belonging to, or connected with, the main Christian Church in medieval times, which had the Pope as its leader     |
| Роре          | The leader of the Catholic Church  |
| Cathedral     | The main church in a district under the care of a bishop   |
| Priest        | A person who is qualified to carry out religious duties and ceremonies in the Catholic Church                      |
| Bible         | The holy book of the Christian religion  |
| Doom painting | A wall painting in a church that shows images of Heaven and Hell   |
| Purgatory     | A place in which, Catholics believe, the souls of the dead suffer so<br>that they can become pure and go to Heaven |
| Saint         | A person that the Christian Church recognises as being very holy   |
| Latin         | An ancient language which was used in the medieval Catholic Church   |
| Tithe         | 1/10 of goods produced or money earnt that was given as a tax to the Church  |
| Shrine        | A place where people come to worship because it is connected with<br>a holy person or event                        |
| Pilgrimage    | A journey to a holy place for religious reasons  |
| The Crusades  | A series of wars fought in the Holy Land between Christians and<br>Muslims   |
| Indulgences   | When the Catholic Church forgave a person's sins they had committed  |



## **Religious Education:**

| Key Word  | Definition   |
|-----------|--|
| Religious | relating to, or believing in, a religion   |
| Belief    | something someone accepts as true or real; a firmly held opinion   |
| Atheist   | a person who disbelieves or lacks belief in the existence of God or gods   |
| Theist    | a person who believes in the existence of a god or gods, specifically<br>of a creator who intervenes in the universe |
| Agnostic  | a person who believes that nothing is known or can be known of the existence or nature of God                        |
| Christian | a person has been baptised or is a believer in Christianity  |
| Design    | a plan or drawing which shows the look of something and/or how it works  |
| Soul      | the spiritual part of a human being  |



#### Art: Colour: Painting

| Composition   | The way in which different elements of an artwork are<br>combined. In general, this refers to the key subjects of the<br>artwork and how they are arranged in relation to each<br>other.                     |
|---------------|--|
| Contrast      | The juxtaposition of difference, used to intensify the properties within the work; eg. light vs dark.  |
| Expressionism | A style of painting, music, or drama in which the artist or writer<br>seeks to express the inner world of emotion rather than external<br>reality.   |
| Fauvism       | A style of painting with vivid expressionistic and non-naturalistic use of colour.   |
| Harmonious    | These colours sit beside each other on the colour wheel. They<br>work well together and create an image which is pleasing to the<br>eye. Harmonious colours may also be referred to<br>as analogous colours. |
| Monochrome    | A photograph or picture developed only in black and white or in varying tones of only one colour.  |
| Neutral       | Muted shades that appear to lack colour but often have<br>underlying hues that change with different lighting. Examples of<br>neutral colours include beige, grey, cream, and brown.                         |
| Orphism       | An abstract, cubist influenced painting style developed by Robert<br>and Sonia Delaunay around 1912 which emphasised the lyrical<br>use of colour.   |
| Shade         | A hue or mixture of pure colours to which only black is added.   |
| Tint          | Where white is added to a colour to create a lighter version of it.<br>An example of a tint is pink.   |
| Tone          | The lightness or darkness of something – this could be a shade, or how dark or light a colour appears.   |



#### **Design Technology: Textiles**

| Applique             | In ceramics and textiles an appliqué is a separate piece of clay or fabric added to the primary work, generally for the purpose of decoration. |
|----------------------|--|
| Cotton               | A woven fabric made of cotton yarns.   |
| Embellish            | To make (something) more attractive by the addition of dec orative details or features.  |
| Embroidery           | Using a needle and thread to hand sew patterns, pictures or words with decorative stitches.  |
| Fabric               | Cloth or other material produced by weaving or knitting fibres.  |
| Нет                  | The edge of a piece of fabric that has been neatened and stitched to prevent fraying and unravelling.  |
| Needle               | A long thin tool with a pointed tip at one end and a hole or eye at the other, used for hand sewing.   |
| Stencil              | A piece of material that has lettering or a design cut out and is used as a guide or overlay.  |
| Sublimation<br>Print | A method of printing that transfers a design into a material or fabric using ink and heat.   |
| Thread               | Used to sew with, typically made from cotton or polyester.   |



## Design Technology: Product Design

| Abrasive     | Used to make surfaces smooth. They are usually paper backed such as glass paper. Start with a coarse grade and then work through the grades to finish with a fine or smooth grade. |
|--------------|--|
| Annotation   | Adding words, phrases and notes to your work, especially in your booklet or sketchbook, that explain your thoughts, ideas and intentions.  |
| Circuit      | A circuit in electronics contains components joined by connecting wires; there is usually a switch to turn on the power supply to make the circuit function.                       |
| Design       | A creative process. Producing a final solution through a problem solving creative process of developing ideas within set constraints.  |
| Isometric    | A method of representing three-dimensional objects on a flat surface by means of a drawing that shows three planes of the object.  |
| LED          | Light -Emitting Diode - A semiconductor diode which glows when voltage is applied.   |
| Pewter       | An alloy of lead and tin which has a very low melting point. Used for casting small items of jewellery.  |
| Pillar Drill | Used for drilling holes through materials including a range of woods, plastics and metals.   |
| Render       | The process of adding shading, colour and texture to a 2D or 3D form in order to create a realistic image with volume and weight.  |
| Tenon Saw    | A small saw with a strong brass or steel back for precise work.  |



## Design Technology: Food

| Bacteria                | Small organisms, or living things, that can be found in all natural<br>environments. They are made of a single cell. Most bacteria can be seen<br>only with a microscope. |
|-------------------------|---|
| Bind                    | Adding a liquid, such as beaten egg or melted fat, to a dry mixture to hold it together.  |
| Bridge Hold             | A knife skill, where you hold the food to be cut between the fingers and<br>thumb creating a bridge. The knife should go through the bridge to cut the<br>food.           |
| Claw Grip               | A knife skill where you hold the food to be cut by creating a claw by partly curling your fingers together into a claw shape.   |
| Cross-<br>Contamination | The process by which bacteria or other microorganisms are<br>unintentionally transferred from one substance or object to another, with<br>harmful effect.                 |
| Food Group              | A way of classifying types of food according to their main nutrients.   |
| Hygienic                | Hygiene is any practice or activity that you do to keep things healthy and clean.   |
| Ingredients             | The individual parts of a recipe of food.   |
| Nutrients               | Chemicals found in food that perform a particular function in the body.   |
| Recipe                  | A set of instructions for preparing a particular dish, including a list of the ingredients required.  |



## **Design Technology: Ceramics**

| Architecture      | The design and construction of buildings. The style in which a building is designed and constructed, especially with regard to a specific period, place, or culture. |
|-------------------|--|
| Applique          | In ceramics and textiles an appliqué is a separate piece of clay or fabric added to the primary work, generally for the purpose of decoration.                       |
| Bisque            | Pottery that has been fired, but not glazed.   |
| Ceramic           | Pots and other objects made from clay and hardened by heat.  |
| Clay              | Moist sticky earth that can be moulded when wet, and is dried and baked to make bricks, pottery, and ceramics.   |
| Frottage          | The technique or process of taking a rubbing from an uneven surface to form the basis of a work of art.  |
| Leather<br>hard   | Clay which is dried and hardened enough to be decorated or trimmed with slip but not enough to be fired.   |
| Organic<br>Shapes | Shapes, often curved in appearance, that are like those found in nature, such as plants, animals, and rocks.   |
| Slab<br>Building  | A construction technique in which clay is rolled into thin sheets and manipulated into shapes.   |
| Texture           | The surface quality of a piece of work. In three-dimensional artwork, the term refers to how the piece feels when it's touched.                                      |



#### Music: What are Melodies and Chords?

| Key Word | Definition   |
|----------|--|
| Musical  | The building blocks of music. Essential components in music.   |
| elements |  |
| Pitch    | The difference between high and low notes  |
| Melody   | An arrangement of pitches to create a tune   |
| Chords   | Three or more different pitches played at the same time  |
| Phrase   | A very small section of music, almost like a musical sentence.   |
| Cadence  | Two or more chords at the end of a phrase. These act as the punctuation in a musical sentence.   |
| Harmony  | The sound created when multiple chords are played one after another  |
| Кеу      | A white or black note on a piano   |
| Middle C | A note found directly to the left of the 2 black keys, near the middle of the piano  |
| Тетро    | How fast or slow a piece is  |
| Beat     | A single "count" in a piece of music   |
| Bar      | A small section of a piece of music based on the number of beats. For example, 4 beats is one of the most common lengths of bar  |
| Octave   | A collection of 8 notes on a piano; C D E F G A B C. Also used to refer to playing something higher or lower (for example, playing on the C above middle C would mean playing one octave above middle C) |
| Rest     | Intentionally playing nothing for one or more beats  |



#### Drama: What is script work and mime?

| Key Word             | Definition  |
|----------------------|---|
| Body language        | Body language includes posture and stance and can convey a character's feelings or personality.   |
| Facial<br>expression | They can convey emotions, develop the story and communicate the feelings and thoughts of the characters to the audience.                                  |
| Freeze frame         | a frame of a motion-picture film that is repeated so as to give<br>the illusion of a static picture.  |
| Flashback            | an interjected scene that takes the narrative back in time from the current point in the story.   |
| Flashforward         | a scene that temporarily takes the narrative forward in time<br>from the current point of the story in literature, film, television<br>and other media.   |
| Split scene          | In drama and theatre, the term is used to describe two or more scenes which are performed on stage at the same time.                                      |
| Soundscape           | A soundscape is the use of sounds which are combined to create mood and atmosphere.   |
| Audience             | he assembled spectators or listeners at a public event such as a play, film, concert, or meeting.   |
| Script               | the written text of a play, film, or broadcast.   |
| Characterisation     | How a character is presented and developed.   |
| Mime                 | A theatrical technique where only facial expressions, gestures<br>and movement are used to suggest a character, emotion or<br>action without using words. |